

REMARKS

This is in full and timely response to the Official Action mailed January 10, 2006. The present Amendment amends claims 2-4 and 16-19 in order to further clarify a portion of the scope sought to be patented, and otherwise disputes certain findings of fact made in connection with the rejection of the claims. Additionally, claims 1 and 5-15 have been amended to correct minor matters of form without narrowing the scope of the claims. Support for these amendments can be found variously throughout the specification, including, for example, page 23, lines 16-19, page 25, lines 14-16 and original claim 18. New claims 20 and 21 have been added. No new matter has been added. Accordingly, claims 1 to 21 are presently pending in the application, each of which is believed to be in condition for allowance. Reexamination and reconsideration in light of the present Amendment and the following remarks are respectfully requested.

Priority Claim

Acknowledgement of the proper receipt of the certified formal papers filed in connection with Applicant's claim to priority under 35 U.S.C. § 119(a)-(d) is noted with appreciation.

Information Disclosure Statement

The Information Disclosure Statements filed on March 31, 2005, August 25, 2005, and December 9, 2005 has been considered by the Examiner as noted by the initialed PTO 1449 form.

Drawings

Acceptance and entry of the original Drawings filed February 24, 2004 and the amended Drawings filed August 25, 2005 is noted with appreciation.

Claim Objections

The Applicant thanks the examiner for a thorough reading of the claims. In accordance with the examiner's suggestion, claims 1-5, 7-11, 13, and 16-19 have been amended to correct a number of minor informalities. Withdrawal of these objections is therefore courteously solicited.

New Claims

Support for new claims 20 and 21 can be found variously throughout the specification, including, for example, original claims 1-4 and 16-19. Since each of these new claims is clearly distinguishable from the applied art of record, allowance of the same is courteously solicited.

Claim Rejections- 35 U.S.C. § 102

In the Action, claims 1-12, 14, and 16-19 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent Application Publication No. 2002/0021324 to Yamada et al. ("Yamada"). This rejection is respectfully traversed.

Claims 1, 12, & 16

Independent claim 1 recites, *inter alia*, a liquid discharge apparatus with a plurality of liquid dischargers comprising, a secondary-control executing unit **for individually setting** whether or not the secondary controlling unit for **each liquid discharger is operated**.

Independent claim 16 recites, *inter alia*, a method for discharging liquid from nozzles with a liquid discharger formed on a plurality of heads aligned in a row, comprising the steps of **individually determining** whether or not a secondary controlling unit **is operated for each liquid discharger**.

In contrast, although Yamada arguably discloses an ink jet recording device with a plurality of electrodes that receive charging-deflecting control signals via a position control unit, Yamada fails to disclose, teach, or suggest *at least* a secondary-control executing unit **for individually setting** whether or not the secondary controlling unit for **each liquid discharger is operated** as recited in claim 1. *See, e.g.*, paragraphs 49 and 57, and Figs. 1 & 2. In fact, Yamada arguably discloses the opposite of **individually setting** whether or not the secondary controlling unit for **each**

liquid discharger is operated because, in Yamada, each pair of electrodes for deflecting ink droplets are associated with a plurality of nozzles so that the charging-deflecting control signals applied to the electrodes affect a plurality of nozzles. *See, e.g.*, paragraphs 48, 49, 57 and Figs. 1 & 2.

Likewise, although Yamada arguably discloses that each pair of electrodes are associated with a plurality of nozzles, Yamada fails to disclose, teach, or suggest *at least individually determining* whether or not a secondary controlling unit **is operated for each liquid discharger** as recited in claim 16. *See, e.g.*, paragraphs 48, 49, 57 and Figs. 1 & 2.

Accordingly, because Yamada fails to disclose, teach or suggest each and every limitation of claims 1 and 16, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”).

Moreover, aside from the novel limitations recited therein, claim 12, being dependent upon allowable base claim 1, is also allowable at least by virtue of its dependency upon allowable claim 1. Withdrawal of the rejection of this claim is therefore courteously solicited.

Claims 2, 5-11, 14, & 17

Independent claim 2 and recites, *inter alia*, a liquid discharge apparatus having a head with a plurality of liquid dischargers comprising, a reference-direction setting unit for **individually selecting for said each liquid discharger** one of the directions of the droplet as **a reference direction**.

Independent claim 17 recites, *inter alia*, a method for discharging liquid from nozzles with a liquid discharger formed on a plurality of heads aligned in a row, comprising the steps of **individually selecting for said each liquid discharger** one of the directions as **a reference direction**.

In contrast, although Yamada arguably discloses an ink jet recording device with a plurality of electrodes that receive charging-deflecting control signals from a charging-deflecting control-

signal generating unit, Yamada fails to disclose, teach, or suggest *at least individually selecting for said each liquid discharger* one of the directions as a reference direction as recited in claims 2 and 17. *See, e.g.*, paragraph 50 and Figs. 1 & 2. In fact, Yamada arguably discloses the opposite of **individually selecting for said each liquid discharger** one of the directions as a reference direction because, in Yamada, each pair of electrodes for deflecting ink droplets are associated with a plurality of nozzles so that the charging-deflecting control signals applied to the electrodes affect a plurality of nozzles. *See, e.g.*, paragraphs 48, 49 and Figs. 1 & 2.

Accordingly, because Yamada fails to disclose, teach or suggest each and every limitation of claims 2 and 17, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., Verdegaal Bros.*, 814 F.2d at 631 (Fed. Cir. 1987) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”).

Moreover, aside from the novel limitations recited therein, claims 5-11 and 14, being dependent upon allowable base claim 2, are also allowable at least by virtue of their dependency upon allowable claim 2. Withdrawal of the rejection of these claims is therefore courteously solicited.

Claims 3, 5-11, 14 & 18

Independent claim 3 recites, *inter alia*, a liquid discharge apparatus having a head with a plurality of liquid dischargers including nozzles comprising, a discharge-angle setting unit for **individually selecting for said each liquid discharger discharge angles** for said droplet discharged from said each liquid discharger.

Independent claim 18 recites, *inter alia*, a method for discharging liquid from nozzles with a liquid discharger formed on a plurality of heads comprising the steps of, **setting a discharge angle** of the droplets **independently for said each liquid discharger**.

In contrast, although Yamada arguably discloses an ink jet recording device with a plurality of electrodes that receive charging-deflecting control signals via a recorded-dot-group position control unit and a charging-deflecting control-signal generating unit, Yamada fails to disclose, teach, or suggest *at least* a discharge-angle setting unit for **individually selecting for said each**

liquid discharger discharge angles for said droplet discharged from said each liquid discharger as recited in claim 3. *See, e.g.*, paragraphs 49, 50, 54-57 and Figs. 1 & 2. In fact, Yamada arguably discloses the opposite of **individually selecting for said each liquid discharger discharge angles** for the droplet discharged from said each liquid discharger because, in Yamada, each pair of electrodes for deflecting ink droplets are associated with a plurality of nozzles so that the charging-deflecting control signals applied to the electrodes affect a plurality of nozzles. *See, e.g.*, paragraphs 48, 49 and Figs. 1 & 2.

Likewise, although Yamada arguably discloses an ink jet recording device with a plurality of electrodes that receive charging-deflecting control signals via a recorded-dot-group position control unit and a charging-deflecting control-signal generating unit, Yamada fails to disclose, teach, or suggest *at least* **setting a discharge angle** of the droplets **independently for said each liquid discharger** as recited in claim 18. *See, e.g.*, paragraphs 49, 50, 54-57 and Figs. 1 & 2.

Accordingly, because Yamada fails to disclose, teach or suggest each and every limitation of claims 3 and 18, a *prima facie* anticipation rejection has not been established, and withdrawal of this rejection is respectfully requested. *See, e.g., Verdegaal Bros.*, 814 F.2d at 631 (Fed. Cir. 1987) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”).

Moreover, aside from the novel limitations recited therein, claims 5-11 and 14, being dependent upon allowable base claim 3, are also allowable at least by virtue of their dependency upon allowable claim 3. Withdrawal of the rejection of these claims is therefore courteously solicited.

Claims 4-11, 14 & 19

Independent claim 4 recites, *inter alia*, a liquid discharge apparatus having a head with a plurality of liquid dischargers including nozzles comprising, a discharge-angle setting unit for **individually setting for said each liquid discharger discharge angles** for each droplet discharged from said each liquid discharger, and a reference-direction setting unit for **individually selecting for said each liquid discharger one of the directions** of the droplet as a reference direction.

Independent claim 19 recites, *inter alia*, a method for discharging liquid from nozzles with a liquid discharger formed on a plurality of heads comprising the steps of, **individually selecting for said each liquid discharger one of the directions as a reference direction, and setting a discharge angle of the droplets independently for each liquid discharger.**

For reasons essentially similar to those set forth above with respect to independent claims 2 and 3, Yamada fails to disclose, teach, or suggest *at least individually setting for said each liquid discharger discharge angles* for each droplet discharged from said each liquid discharger, and a reference-direction setting unit for **individually selecting for said each liquid discharger one of the directions of the droplet as a reference direction** as recited in claim 4. For reasons essentially similar to those set forth above with respect to independent claims 17 and 18, Yamada fails to disclose, teach, or suggest *at least individually selecting for said each liquid discharger one of the directions as a reference direction, and setting a discharge angle of the droplets independently for each liquid discharger* as recited in claim 19. Accordingly, a *prima facie* anticipation rejection has not been established with respect to claims 4 and 19, and withdrawal of the rejection of these claims is respectfully requested.

Moreover, aside from the novel limitations recited therein, claims 5-11 and 14, being dependent upon allowable base claim 4, are also allowable at least by virtue of their dependency upon allowable claim 4. Withdrawal of the rejection of these claims is therefore courteously solicited.

Claim Rejections- 35 U.S.C. § 103

In the Action, claims 13 and 15 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamada in view of U.S. Patent No. 5,754,201 to Ishinaga et al. ("Ishinaga"). This rejection is respectfully traversed.

Claims 13 and 15 depend from claim 1. By virtue of this dependency, Applicant submits that claims 13 and 15 are allowable for at least the same reasons given above with respect to claim 1. In addition, Applicant submits that claims 13 and 15 are further distinguished over Yamada and Ishinaga by the additional elements recited therein, and particularly with respect to each claimed

combination. Applicant respectfully requests, therefore, that the rejection of claims 13 and 15 under 35 U.S.C. § 103(a) be withdrawn, and these claims be allowed.

Conclusion

For at least the foregoing reasons, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the examiner is respectfully requested to pass this application to issue. If the examiner has any comments or suggestions that could place this application in even better form, the examiner is invited to telephone the undersigned attorney at the below-listed number.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. SON-2918 from which the undersigned is authorized to draw.

Dated: April 5, 2006

Respectfully submitted,

By 

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